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USSN: 10/699,586 Group Art Unit: 3739 Docket No.: 151P11200US01

## AMENDMENTS TO THE CLAIMS

- 1. (Currently amended) An apparatus for making a hole of a first predetermined diameter in a dura of a patient for the insertion of a catheter having a second predetermined an outside diameter, comprising:
  - a catheter having a lumen;
  - a stylet having a first end adapted for insertion in said lumen;
  - said stylet having a second end formed with a tip having a hemispherical shape with a diameter approximately equal to said first predetermined diameter having a hemispherical diameter not greater than said outside diameter of said catheter; and
  - means for applying an electrical current to said tip of said stylet to cauterize said dura; dura.
  - wherein said first predetermined diameter is not greater than said second predetermined diameter.
- 2. (Canceled)
- (Canceled)
- 4. (Canceled)
- 5. (Canceled)
- (Currently amended) An apparatus as in claim 1 wherein said first predetermined diameter hemispherical diameter is approximately equal said outside predetermined diameter.

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7. (Currently amended) An apparatus as in claim 1 wherein said first predetermined hemispherical diameter is smaller than said second predetermined outside diameter.

8. (Currently amended) An apparatus as in claim 7 wherein said first-predetermined <a href="https://linear.nih.gov/hemispherical\_diameter">hemispherical\_diameter</a> is approximately fifteen percent (15%) percent-smaller than said second-outside diameter.

9. (Original) A method of making a hole of a first predetermined diameter in a dura of a patient having a cranium for the insertion of a catheter having a second predetermined diameter, comprising the steps of:

determining whether to create a burr hole in said cranium of said patient;

inserting a first end of said stylet with a tip having a hemispherical shape with a diameter approximately equal to said first predetermined diameter into said burn hole of said cranium, wherein said first predetermined diameter is not greater than said second predetermined diameter;

applying an electrical current to said stylet in order to cauterize said dura creating a hole in said dura approximately equal to said diameter of said tip; and

inserting a second end of said stylet into a lumen of a catheter with said second end of said stylet proximal to a distal end of said catheter.

- 10. (Canceled)
- 11. (Canceled)
- 12. (Canceled)
- 13. (Original) A method as in claim 9 wherein said first predetermined diameter is approximately equal to said second predetermined diameter.

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- 14. (Original) A method as in claim 9 wherein said first predetermined diameter is smaller than said second predetermined diameter.
- 15. (Original) A method as in claim 14 wherein said first predetermined diameter is approximately fifteen percent (15%) smaller than said second diameter.
- 16. (New) An apparatus for making a hole in a dura of a patient for the insertion of a catheter having an outside diameter, comprising:

a catheter having a lumen;

a stylet having a first end adapted for insertion in said lumen;

said stylet having a second end formed with a tip having a hemispherical shape, with a rounded surface and a flat surface, wherein said rounded surface of said hemisphere is oriented towards said first end of said stylet and said flat surface of said hemisphere is oriented toward said second end of said stylet; and

means for applying an electrical current to said tip of said stylet to cauterize said dura.

17. (New) An apparatus as in claim 16:

wherein said catheter has an outside diameter;

wherein said rounded surface of said hemispherical shape has a hemispherical diameter; and

said hemispherical being not greater than said outside diameter of said catheter.

- 18. (New) An apparatus as in claim 16 wherein said hemispherical diameter is approximately equal to said outside diameter.
- 19. (New) An apparatus as in claim 16 wherein said hemispherical diameter is smaller than said outside diameter.

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- 20. (New) An apparatus as in claim 19 wherein said hemispherical diameter is approximately fifteen percent (15%) smaller than said outside diameter.
- 21. (New) An apparatus as in claim 1:

wherein said catheter has a relaxed outside diameter in a relaxed state and a stretched outside diameter in a stretched state;

wherein said diameter of said hemispherical shape of said tip of said stylet is not greater than said relaxed diameter of said catheter; and

wherein said diameter of said hemispherical shape of said tip of said stylet is greater than said stretched diameter of said catheter.

22. (New) A method as in claim 9 further comprising the steps of:

stretching said catheter on said stylet into a stretched state with a stretched outside diameter;

inserting said catheter into said hole in said dura;

relaxing said catheter into a relaxed state.

- 23. (New) A method as in claim 22 wherein said second predetermined diameter of said catheter in said relaxed state is approximately equal to said first predetermined diameter.
- 24. (New) A method as in claim 22 wherein said stretched outside diameter is less than said first predetermined diameter.